

2. PROJECT DESCRIPTION

2.1 Need of the Project

The existing OCGTs (i.e. GT2, GT3, GT4 and GT6) and CCGT (i.e. GT57) within the GT Compound have been in operation for more than 30 years since 1989. The aging units, which are approaching the end of their service life, are becoming less efficient in their operation and requiring more frequent inspections and maintenance. The control system of the existing units is also obsolete and the equipment suppliers do not have the necessary spare parts or provide technical support that enable the continuous operation of these existing units. Hence, there is a need to decommission and demolish these existing units, and to construct and commission new units progressively in the effort to replace the function of the existing units in maintaining the peak-opping and emergency operation requirements, so as to ensure the continuous operation of the LPS and its provision of stable and reliable electricity supply in Hong Kong.

2.2 Purpose and Objectives of the Project

The Project aims to decommission and demolish the existing GT2, GT3, GT4, GT57 and GT6 which are approaching the end of their service life, and subsequently construct and operate up to four new OCGTs (i.e. GT8, GT9, GT10 and GT11) as a replacement to the abovementioned existing units. Upon the progressive retirement of the existing units, the new OCGTs serve to take over the function of these existing units in providing additional power generation during peak-opping and maintaining back-up power supply in case of emergency situations for the continuous operation of the LPS. The four new OCGTs would have a capacity of up to 130MW each, with a total power generation capacity of up to 520MW.

The Project is classified as a Designated Project under the EIAO (Cap. 499) as a result of the following elements:

- Demolition of four existing OCGTs and one existing CCGT at LPS (Schedule 2, Part II, Item 4 A public utility --- electricity power plant); and
- Installation of up to four new OCGTs at LPS (Schedule 2, Part I, Item D.1 Public utility electricity power plant).

2.2.1 Environmental Benefits of the Project

The operation of the aging units is increasingly less efficient and could potentially lead to higher air emissions. New OCGTs are much more efficient and capable of attaining a more stringent emission standards and thus producing lower air emissions during operation, in particular nitrogen oxides (NO_x), when generating the same amount of power as the existing OCGTs. Therefore, the Project is beneficial from an environmental perspective and can be considered as part of the ongoing effort of HK Electric to further reduce the overall air emissions from the operation of LPS and contribute to the long-term air quality improvement in Hong Kong.

2.2.2 Scenarios with and without the Project

If the Project does not proceed, HK Electric will slowly lose the capacity of additional power generation to cope with the electricity demand during peak-opping and maintaining power supply in case of emergencies upon the progressive retirement of the existing units from 2022 onwards. Such capacity will be completely lost upon complete retirement and decommissioning of these existing units. This would hamper the normal operation of LPS significantly and put HK Electric's stable and reliable supply of electricity at risk.

With the Project in place, HK Electric would enable the decommissioning of the existing units and construction of the new OCGTs progressively (i.e. decommissioning of at least one existing unit before commissioning of one new OCGT), allowing a smooth transition of the OCGT reprovision programme and at the same time maintaining the necessary capacity for coping with the additional

power demand during peak-logging and emergency operation. Upon putting into operation, the new OCGTs can be in service for years to come and are integral to the future LPS operation in supplying stable and reliable electricity in Hong Kong.

2.3 Background and History of the Project

The existing GT2, GT3, GT4, GT57 and GT6 have been in operation since 1989 and are situated in the GT Compound of the LPS at the western edge of Lamma Island (see **Figure 2.1a**). The GT Compound has been occupied by these existing units and their associated buildings and facilities ever since the commencement of LPS operation. GT57 was originally two separate OCGTs (i.e. GT5 and GT7) that were converted into a CCGT with power generation capacity of 345MW in 2002. GT57 was subsequently converted to a gas-fired unit in 2008. Having a power generation capacity of 125MW each, GT2, GT3, GT4 and GT6, together with GT57, have a total power generation capacity of 845MW. The new OCGTs will be constructed within the GT Compound where the existing GT2, GT3, GT4, GT57 and GT6 are located. This has been identified as the preferred development option which is further discussed in **Section 2.4** below.

2.4 Consideration of Different Development Options

A number of different development options have been considered having regard to the upcoming retirement and decommissioning of the existing OCGTs and CCGT within the GT Compound. Options of power generation for peak-logging and emergency operations, and site selection for the new OCGTs have been considered.

2.4.1 Power Generation

A number of options have been explored to cope with the electricity demand during peak-logging and emergency operations upon progressive retirement and decommissioning of the aforementioned existing units. The options considered include:

- Construction of new CCGTs;
- Construction of new OCGTs;
- Extending services of existing OCGTs;
- Importing power supply from Mainland China; and
- Use of renewable energy.

The considerations of the above options are discussed in the following sub-sections.

2.4.1.1 Construction of New CCGTs

CCGT is equipped with a steam generator to recover heat from exhaust gas of the gas turbine and is thus more efficient than an OCGT in power generation. Due to CCGT's higher efficiency, fuel consumption and associated air emissions arising from the operation of a CCGT would be lower than that from the operation of an OCGT. However, CCGT does not have fast start-up capability which is the key to providing swift electricity supply during peak-logging and emergency situations. Therefore, construction and operation of new CCGTs is considered not suitable and thus is not preferred.

2.4.1.2 Construction of New OCGTs

OCGT consists of a single compressor/ gas turbine assembly that is connected to an electricity generator via a shaft. OCGT has the major advantage of fast start-up capability and can generate electricity within a relatively short time. It is less efficient than a CCGT in power generation as it does not have a steam generator to recover heat from the exhaust gas of the gas turbine. Due to OCGT's relatively low efficiency, fuel consumption and associated air emissions during the operation of an OCGT would be higher as compared with that of a CCGT.

However, given their fast start-up capability, OCGTs are capable of serving the objective of providing swift electricity supply during peak-opping and emergency situations. As the OCGTs will only be needed during peak-opping and emergency situations and not used as base load for electricity generation, the operation of the OCGTs is only intermittent and the associated emissions are only short-term. New OCGTs can also achieve more stringent emission standards as compared with the existing OCGTs. Hence, construction and operation of new OCGTs is considered more favourable from an operational and fit-for-purpose perspective.

2.4.1.3 Extending Services of Existing OCGTs

The existing units have been in operation since 1989. Most of the critical components of the power block facilities including the gas turbine casings, hot gas path components and generators would require replacement in order to extend the services of these existing units. Besides the need of replacement of different components of the existing units, substantial refurbishment works will also be required for the steel structures, gas turbine inlet air and exhaust gas ductworks. The control system of the existing units is also obsolete and the equipment suppliers do not have the necessary spare parts or provide technical support that enable the continuous operation of the existing units. Therefore, replacement of components and refurbishment works to extend services of the existing units are considered not technically viable or cost-effective and hence not the long-term solution for the operation of LPS. Hence, such option is considered less favourable.

2.4.1.4 Importing Power Supply from Mainland China

In addition to generating power locally, importing power from the Mainland China for the purpose of peak-opping and emergency operations has also been explored with the following considerations:

- *Infrastructure* – there is currently lack of infrastructure for connecting to the power grid in Mainland China. There is a long lead time to build the necessary infrastructure and will not meet the retirement schedule of the existing units (to be retired and decommissioned tentatively starting from 2022);
- *Reliability and control issue* – the HKSAR government do not have direct control and regulation of the electricity imported from Mainland China. Reliable electricity supply during peak-opping or emergency operations cannot be guaranteed if HK Electric rely on power supply import from Mainland China;
- *Displacement of pollutants* – local pollutants from power generation will be displaced to Mainland China, where the HKSAR government or HK Electric have no control over the emission performance.

In view of the above, it is considered that local generation would provide more certainty in terms of maintaining electricity supply reliability, especially during peak-opping and emergency operations, as well as improving environmental performance. Hence, importing power from Mainland China is not preferred.

2.4.1.5 Use of Renewable Energy

HK Electric has made continual effort to explore the use of renewable energy for electricity generation. For example, HK Electric is planning to build an offshore wind farm in Hong Kong waters to be located around 4km southwest of Lamma Island. However, renewable energy cannot supply electricity on demand in order to serve the purpose of peak-opping or emergency operations due to its intermittent nature and is thus not a viable option.

2.4.1.6 Preferred Option of Power Generation

Based on the above discussion, the construction and operation of new OCGTs is considered the most practicable and preferred option to pursue as this involves essentially like-to-like replacement, is fit for

purpose, environmentally beneficial and technically the most practicable. Other options would present impracticality and uncertainties, or may not tie in with the retirement schedule of the existing units.

2.4.2 Siting

The existing GT Compound, L13 area and L3 Main Station Building within the LPS and Lamma Extension (LMX) have been identified as potential sites for accommodating the new OCGTs. The locations of the existing GT Compound, L13 area and L3 Main Station Building are shown in **Figure 2.2**. These three potential sites have been carefully compared based on a number of factors. Consideration of these factors for site selection are detailed in **Table 2.1**.

Table 2.1 Comparison of the Identified Potential Sites for New OCGTs

Considering Factors	GT Compound	L13 Area	L3 Main Station Building ^(a)
Site Condition	The GT Compound area can be made available after demolition of the existing OCGTs and CCGT. The existing foundation piles and reinforced concrete structures could be reused for the construction of the new OCGTs.	The L13 Area is currently vacated for the future development of the proposed L13. The layout of the proposed L13 will be affected and needs to be redesigned to accommodate the new OCGTs within the L13 Area. The construction of the new OCGTs could interface with that of the proposed L13 and potentially pose constraints on the design and construction of the proposed L13. Foundations and concrete structures for the new OCGTs need to be constructed.	Part of the L3 Main Station Building structures could be reused for the installation of the new OCGTs. The entire coal-fired boiler and power train and associated auxiliary equipment inside the L3 Main Station Building need to be demolished to create space for installation of the new OCGTs, which is a costly construction option and requires much longer construction period. The proximity of the L3 Main Station Building to the existing coal conveyor and electrostatic precipitators would restrict the layout of the new OCGTs.
Space Adequacy	With the removal of the existing OCGTs and CCGT, there would be sufficient space for constructing the new OCGTs, cable trenches and associated facilities.	L13 Area is currently vacated and have sufficient space for the Project. However, the installation of the new OCGTs and associated facilities would take up part of the L13 Area that would otherwise be available for the proposed L13 and thus will hinder the development of the proposed L13 in the future.	The L3 Main Station Building is congested with a number of existing equipment, some of which may need to be demolished and removed to make space for the installation of the new OCGTs and associated facilities. This would pose challenges from a technical and engineering perspective and would also prolong the construction period of the Project.
Chimneys	With minor repair and refurbishment works, existing chimneys serving the existing OCGTs and CCGT can be reused for the new OCGTs.	The chimney to be constructed for the proposed L13 could be used to serve the new OCGTs. However, the chimney will need to be re-designed to accommodate the new flues within the chimney.	Existing chimney used to serve L3 cannot be reused for the new OCGTs and needs to be removed which involve significant demolition works. Construction of a new

Considering Factors	GT Compound	L13 Area	L3 Main Station Building ^(a)
		With the use of the same chimney, there could be interfacing issue between the development of the proposed L13 and the new OCGTs.	chimney is required for the new OCGTs.
Foundation and Civil Works	The construction of the Project only involves minor civil works as the existing foundation piles and reinforced concrete structures could be reused. Foundation works for the new OCGTs are not required.	No existing foundation piles or reinforced concrete structures are present. The construction of the Project requires foundation works which involve considerable excavation and piling works. Major aboveground civil works are also required.	Existing foundation piles and reinforced concrete structures cannot be reused. Significant demolition works followed by excavation, piling and civil works are required for the construction of the Project.
Environmental Consideration	No foundation works and only minor civil works are required, resulting in low generation of waste materials. Other potential environmental impacts (e.g. air quality and noise) can also be minimised.	Significant foundation works and civil works are required, resulting in high generation of waste materials. The associated excavation and piling works may also pose implications on other environmental aspects (e.g. air quality and noise)	Significant demolition, foundation and civil works are required, resulting in higher generation of waste materials. The associated demolition, excavation and piling works may also pose implications on other environmental aspects (e.g. air quality and noise). Detailed land contamination assessment within the area may also be required.

Notes:

(a) Unit L3 was decommissioned in 2018.

The site comparison assessment as shown in **Table 2.1** revealed that it is more desirable to develop the new OCGTs within the GT Compound where the existing OCGTs and CCGT to be removed are located, having considered various factors including site condition, space adequacy, construction feasibility and complexity, and environmental impacts. The development and construction of the new OCGTs in L13 Area and L3 Main Station Building would increase the scale and scope of the Project, are technically more challenging and complex in construction, require a longer programme and incur higher costs. In terms of environmental impact, development of the new OCGTs in L13 Area and L3 Main Station Building would require considerable excavation and piling works which have the potential to generate significant amount of construction waste and also cause other environmental impacts such as impacts on air quality and noise. Development of the new OCGTs in L3 Main Station Building may even require extensive demolition works to create space, resulting in additional environmental impacts. On the other hand, development of the new OCGTs within the existing GT Compound can minimise waste generation and other environmental impacts as the foundation and reinforced concrete structures after the removal of the existing units can be reused for the installation of the new OCGTs. Therefore, it is considered preferable to develop the new OCGTs within the GT Compound.

2.5 Details of the Project

The Project involves the decommissioning and demolition of the existing GT2, GT3, GT4, GT57 and GT6 within the GT Compound of LPS, and the construction and operation of four new OCGTs (i.e. GT8, GT9, GT10 and GT11) within the GT Compound, in order to maintain the peak-opping and emergency operation requirements essential for the continuous operation of LPS in the future. The Project site includes the GT Compound as shown in **Figure 2.1a / Figure 2.1b**. The existing units will

be decommissioned and demolished sequentially, with one new OCGT to be constructed upon the removal of at least one existing unit. The locations of the existing units and the proposed new units within the Project site are shown in **Figure 2.1a** and **Figure 2.1b**, respectively. As part of the Project, some modifications to the existing buildings and facilities and construction of new cable trenches within the GT Compound will be carried out to support the future operation of the new OCGTs.

2.5.1 Overview of Project Components

2.5.1.1 New OCGTs

Each of the four new OCGTs essentially consists of a gas turbine and a generator, and will be operated by firing ultra-low sulphur diesel (ULSD) to produce electricity under peak loads and emergency situations. Fresh air is drawn into the compressor where it is compressed for mixing with the fuel (i.e. ULSD) and burning in the combustion chamber. The high temperature gas generated in the combustion chamber is then passed through the turbine blades, which in turn rotate the generator rotor to generate electricity. The generation capacity of each new OCGT is up to 130MW, with a total generation capacity of up to 520MW from four new OCGTs. The exhaust gas from GT8, GT9, GT10 and GT11 will be discharged via the existing chimneys currently serving GT2, GT5, GT6 and GT7. The existing chimneys for GT3 and GT4 will be retained but not utilised under this Project. The new OCGTs will be air-cooled with no requirement for cooling water intake or discharge during operation.

2.5.1.2 Black Start Gas Turbine (BSGT)

A BSGT with capacity of 2.2MW is currently installed near the west boundary of the GT Compound and serves to provide start up power for the OCGTs in case of rare black out situations. The existing BSGT is also nearing the end of its service life and will be replaced by a new BSGT of similar capacity as the existing BSGT as part of this Project.

2.5.1.3 Battery Energy Storage System (BESS)

A new BESS with an estimated output of around 3MW will be erected to the south of the BSGT. The BESS is of modular type and will be accommodated in a container in which all equipment including inverter, transformer, air conditioner, fire services, lighting etc. are equipped. Similar to the BSGT, the BESS also serves to provide start up power for the OCGTs in case of rare black out situations. During black out situations, the BESS will be put into operation first, while BSGT acts as the back up to the BESS.

2.5.1.4 132kV Switching Station

The existing GT57 Auxiliary Building (GTAB) will be converted to a new 132kV Switching Station for the operation of the new OCGTs. All existing equipment inside the GTAB, including the GT57 steam turbine, generator, condenser and other auxiliary equipment as well as the existing Turbo Block structure will be removed and demolished to make space for converting the GTAB into a new 132kV Switching Station. The new 132kV Switching Station will accommodate the gas insulated switchgear, associated electrical, instrumentation and control equipment, as well as a battery charger system. A new staircase and lift for the new 132kV Switching Station and new cable trenches for 132kV cables connecting the new OCGTs, BSGT and BESS to the new 132kV Switching Station will also be constructed.

2.5.2 Decommissioning, Demolition and Construction Activities

2.5.2.1 Removal of Existing Units and Installation of New Units

The existing GT2, GT3, GT4, GT57 and GT6 as well as their auxiliaries (e.g. generator coolers, transformers) will be decommissioned and demolished to make space for the construction of the new OCGTs. The existing BSGT will also be demolished and replaced with a new BSGT. The new BESS

will also be installed south of the BSGT. Typical construction equipment such as electric breakers, flame cutting and powered mechanical hand tools will be used during demolition works. All major equipment and piping associated with the new OCGTs and BSGT will be fully assembled off-site as far as practicable and then installed on site such that construction works on site can be minimised. Mobile cranes will be deployed for the removal and installation of heavy equipment such as generators, gas turbines and tube bundles. The new OCGTs and BSGT will have similar footprint as the existing ones and as such, the existing foundation piles and reinforced concrete structure will be reused to support the new OCGTs and BSGT as far as practicable. It is expected that foundation works for the new OCGTs and BSGT are not required and the civil works associated with the construction of the new OCGTs and BSGT are minimal. The existing chimneys to be retained for use by the new OCGTs will undergo necessary refurbishment works.

2.5.2.2 Reconstruction Works within GTAB

The existing GTAB will be converted to a new 132kV Switching Station. All equipment inside the existing GTAB, including the lube oil tank, chemical dosing pit, steam turbine, generator, condenser, cooling water pump, etc., will be removed and demolished using typical equipment such as grinder, flame cutting and powered mechanical hand tools. The demolition and removal of the existing Turbo Block Structure inside the GTAB will require minor excavation down to about 2.6m below ground over an area of about 200m², and such demolition and removal works will use typical equipment such as excavators, mobile cranes, electric breakers and other powered mechanical hand tools. The installation of gas insulated switchgear, electrical and control panels and other associated equipment inside the new 132kV Switching Station will involve general lifting operation and manual installation, which will be carried out by typical equipment such as overhead crane and powered mechanical hand tools.

2.5.2.3 Construction of New Staircase and Lift and Cable Trenches

A new staircase and lift will be constructed at the immediate east of the GTAB, which is currently occupied by the circulating water pipe room to be demolished under this Project. The construction of the new lift pit will require excavation down to 5m below ground. In addition, new cable trenches will be constructed to house the new 132kV cables connecting the new OCGTs, BSGT and BESS to the new 132kV Switching Station. Minor excavation down to about 1.8m below ground will be required for the construction of new cable trenches, where the excavated materials will be used for backfilling as far as practicable after cable laying. Typical equipment such as excavators, mobile cranes, welding machines and other powered mechanical hand tools will be used during excavation and backfilling works, cable laying and construction of the new staircase and lift.

2.5.2.4 Removal of Other Existing Structures

As part of the Project, the existing lube oil storage tank near GT5 and the miscellaneous storage shed south of the existing BSGT will be demolished. Typical equipment used for removal of these other structures include grinder, flame cutting and other powered mechanical hand tools.

2.5.3 Operation Activities

The new OCGTs will commence operation in phases upon completion of construction and testing and commissioning. The OCGTs will be operated under peak-opping and emergency situations. The new BESS and BSGT will also be put into service upon completion of construction and testing and commissioning, but they will only be operated to supply the required power to start up the new OCGTs in case of rare black-out situation. Under such rare black-out situation, the new BESS, which does not involve air emissions during its operation, will be used first instead of the BSGT. Therefore, the operation of the new BSGT is considered extremely rare.

Both the new OCGTs and BSGT will be fuelled by ULSD and stack emissions during their operation will comply with the requirements recommended in the *Guidance Note on the Best Practicable Means*

for Electricity Works (BPM7/1(2018)), and those to be stipulated in the SP licence issued under the Air Pollution Control Ordinance (APCO). The power generated by the new OCGTs, BSGT and BESS will be transmitted via the new 132kV cables to the 132kV Switching Station, and eventually to HK Electric’s power grid.

2.6 Tentative Implementation Programme

HK Electric proposes to decommission and demolish the existing GT2, GT3, GT4, GT57 and GT6, and to construct and commission the new GT8, GT9, GT10 and GT11 within the GT Compound successively between 2022 and 2028. The tentative implementation programme is provided in **Table 2.2**.

Table 2.2 Tentative Implementation Programme of the Project

	2022		2023		2024		2025		2026		2027		2028	
	Q3-Q4	Q1-Q2	Q3-Q4	Q1-Q2	Q3-Q4	Q1-Q2	Q3-Q4	Q1-Q2	Q3-Q4	Q1-Q2	Q3-Q4	Q1-Q2	Q3-Q4	
Decommissioning and Demolition of Existing Units														
GT2														
GT3														
GT4														
GT57														
GT6														
Construction of New Units														
GT8														
GT9														
GT10														
GT11														
Other Construction														
Construction of New Cable Trenches														
Construction of New 132kV Switching Station, Staircase and Lift														
Installation of BESS and BSGT														
Commissioning of New Units														
GT8														
GT9														
GT10														
GT11														

2.7 Concurrent Projects

The Project is located within the existing LPS site. The following existing, committed or planned projects in the vicinity of the Project site may potentially interface with the demolition, construction and operation of this Project:

- 1,800MW Gas-fired Power Station at Lamma Extension (AEIAR-010/1999):** This project includes the construction and operation of six new gas-fired CCGT units at the Lamma Extension. L9 and L10 have been constructed and are currently under operation. L11 and L12 are currently under construction and are scheduled for commercial operation in 2022 and 2023 respectively. L13 is scheduled for commercial operation after 2023.
- Hong Kong Offshore LNG Terminal (AEIAR-218/2018):** This project involves the construction and operation of an offshore liquefied natural gas (LNG) terminal that is to be located in the southern waters of Hong Kong, to the east of the Soko Islands. The offshore LNG terminal will supply natural gas to the gas receiving stations at the Black Point Power Station (BPPS) and the LPS via two subsea pipelines. The construction of the project commenced in the third quarter of 2020 and is expected to last for about 2 years.
- Improvement Dredging for Lamma Power Station Navigation Channel (AEIAR-212/2017):** This project involves improvement dredging of the Channel to the west of LPS during construction phase, and subsequent recurrent improvement dredging every 4 to 10 years during operation phase. The construction of the Project commenced in February 2020 for completion tentatively by end of 2021.
- Development of a 100MW Offshore Wind Farm in Hong Kong (AEIAR-152/2010):** The project involves the development of an offshore wind farm located in the waters between Lamma Island and Cheung Chau. The offshore wind farm will produce around 100MW of electricity, which will

be supplied directly to the HK Electric grid network. The implementation programme of this project is under review and not yet available at this stage.

- *Lamma Power Station – Unit L2 Flue Gas Desulphurization Plant Retrofit Project (DIR-153/2007)*: The project involves retrofit of Flue Gas Desulphurization (FGD) plant to the existing unit L2 for reducing sulphur dioxide emissions. The project is anticipated to retire along the tentative retirement of unit L2 in late 2022.
- *Lamma Power Station Units L4 & L5 Flue Gas Desulphurization Plant Retrofit Project (AEIAR-098/2006)*: The project involves retrofit of FGD plant to the existing units L4 and L5 for reducing sulphur dioxide emissions and is currently under operation phase. The project is anticipated to retire along the tentative retirement of units L4 and L5 in 2022-2023.
- *Renewable Energy by a Wind Turbine System on Lamma Island (AEIAR-080/2004)*: The project involves the construction and operation of a 800kW wind turbine at Tai Ling Tsuen on Lamma Island. The construction of the project commenced in February 2005 and lasted for 12 months. The project has been put into operation since February 2006

The above concurrent projects may pose cumulative impact with the demolition, construction and/or operation of the Project. The cumulative impacts from the above concurrent projects are addressed in the relevant technical assessments in this EIA as appropriate.

In addition, *Conversion of Two Existing Gas Turbines (GT5 & GT7) into a Combined Cycle Unit (DIR-037/2000)* is currently active and in operation phase. With GT57 to be decommissioned and demolished as part of this Project, DIR-037/2000 will not interface with the demolition, construction or operation of this Project and thus would not pose any cumulative impact.

2.8 Public Engagement

As part of the EIA study, ERM, on behalf of HK Electric has reached out to the local communities in Lamma Island via three community leaders in Lamma, namely Mr Chan Lin-wai, MH, Chairman of the Lamma Island (North) Rural Committee, Mr Chow Yuk-tong, SBS, MH, Chairman of the Lamma Island (South) Rural Committee, and Ms Lau Shun-ting, Islands District Council Member, by providing them briefing notes of the Project by registered mail on 21 July 2021 in order to seek their views and opinions on the Project and the associated environmental impact. Face-to-face meetings were avoided due to the current COVID-19 pandemic. No feedback or opinions have been obtained from the stakeholders concerned during the course of the EIA study.

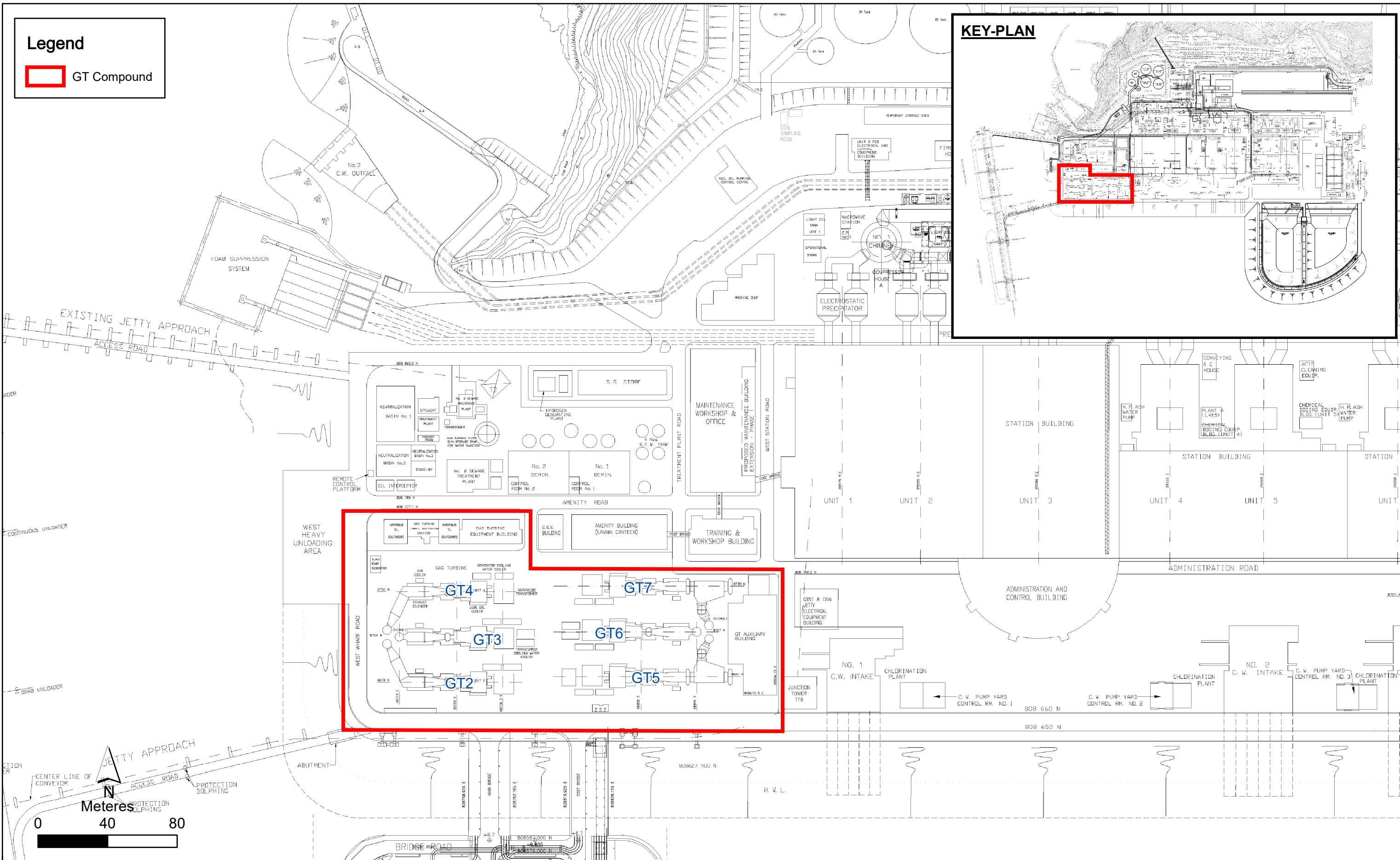


Figure 2.1a

Location of Gas Turbine Compound and its Existing Units at Lamma Power Station

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Environmental
 Resources
 Management



Legend

 GT Compound

KEY-PLAN

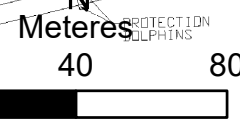
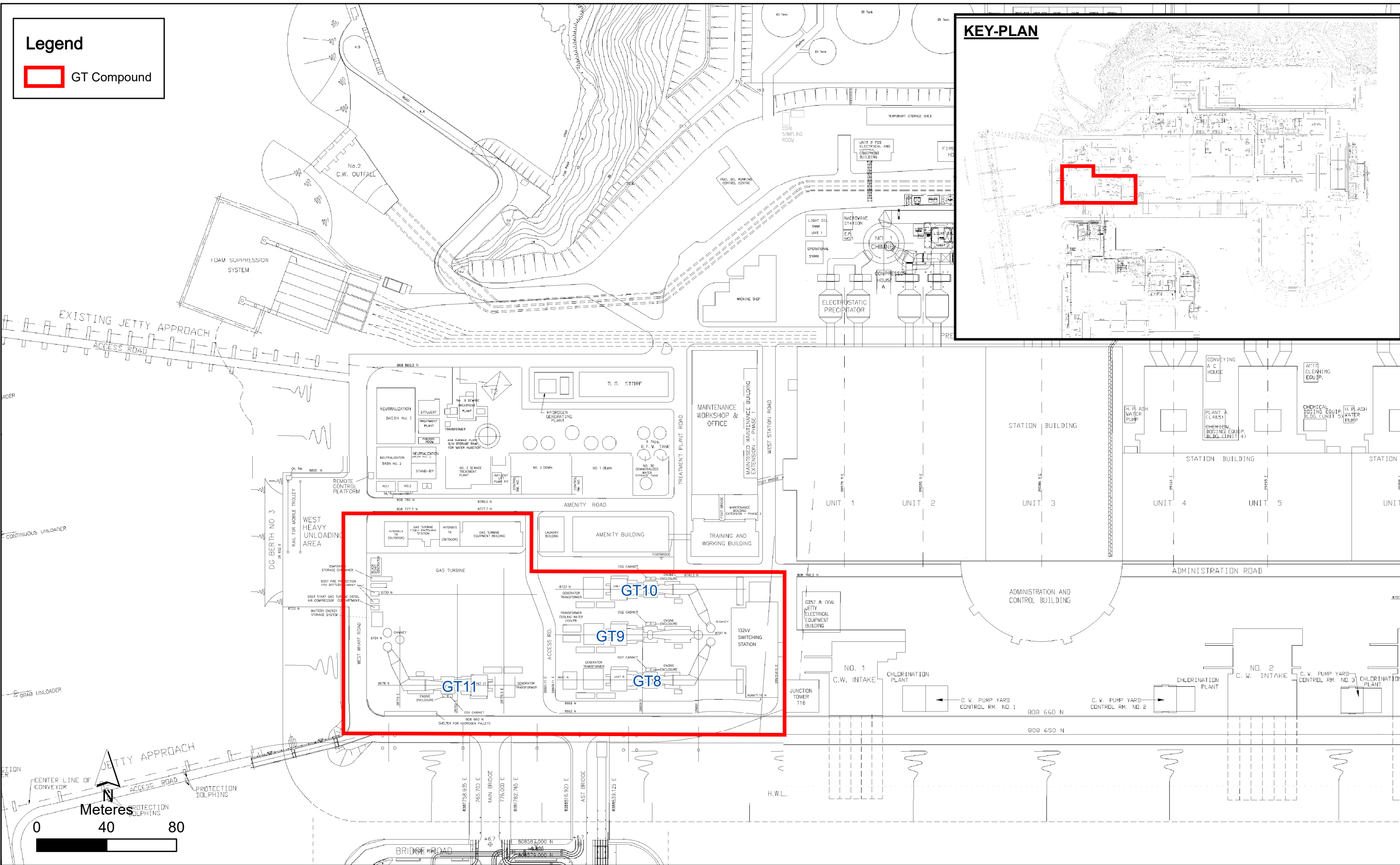
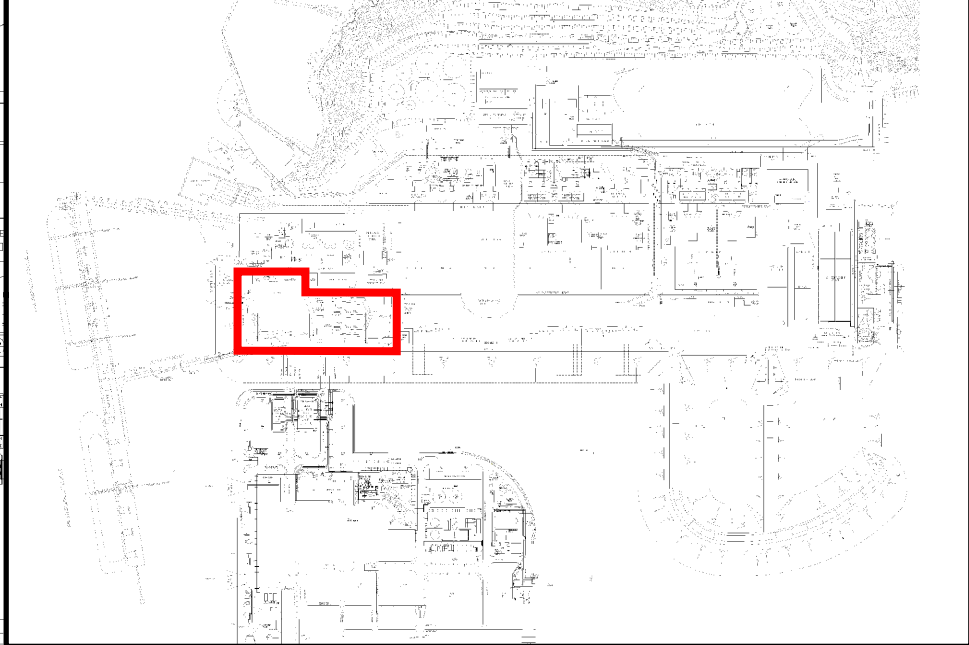


Figure 2.1b

Location of Gas Turbine Compound and its Proposed New Units at Lamma Power Station

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Environmental Resources Management



Legend

Identified Potential Sites

- GT Compound
- L13 Area
- L3 Main Station Building

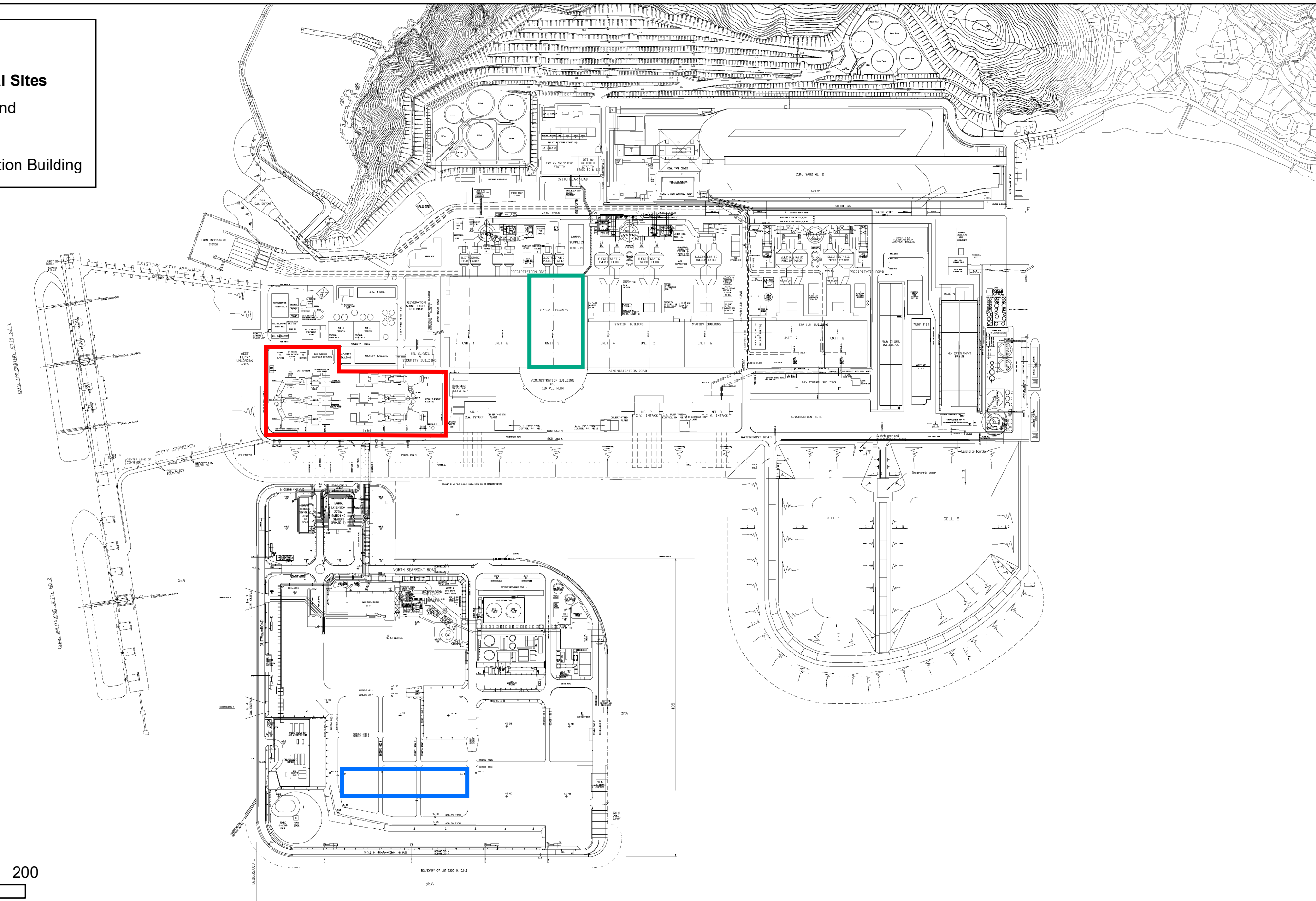


Figure 2.2

Identified Potential Sites for the New Open Cycle Gas Turbine Units within the Lamma Power Station and Extension Site

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**Environmental
Resources
Management**

